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RAYCORE

Q3-S110 V4.1E

Specification of L2 Switch Non Managed,
10-GbE Twin-Rate, 4E-GbE

Part Number: AMCN-WT4x-xx1xx-02



(Without Fiber Tray)



(With Fiber Tray)

The AMCN-WT4x-xx1xx-02 Series is a stand-alone optical fiber switch for 4x10/100/1000 Base-T. This switch, with its patented functions, is unique due to its ability of selecting either 100 Mbps or 1 Gbps on the fiber port, using the 1x9 module. With this switch the FTTH networks can grow from today's need of 100 Mbps to tomorrow's need of 1 Gbps—without the need of physically upgrading the switch. Simply exchange the 100 Mbps SFP in the access node switch with a 1 Gbps SFP (the access node switch must of course support Gbps speed). The switch will then automatically select the higher speed—and you now have a full featured Gbps network all the way to the end-user.

Features

- Unique patented switch that supports both 100 Mbps and 1 Gbps on the fiber port using the 1x9 module
- Fully supports the Raycore Twin-Rate™ module (for 100 Mbps and 1 Gbps speeds)
- Operates in store and forward mode
- MDI/MDIX auto-crossover for TP ports
- Auto-negotiation (10/100/1000 Mb/s) for TP ports
- Optional fixed tag VLANs on TP ports



Specifications

LAN Interface Specification

- Four RJ-45 female connector for straight or cross-over connection
- Supports 10/100/1000 Base-TX, n-way (Auto-Negotiation)
- Supports Full, Half duplex, 10/100/1000 speed Auto mode selections
- Transmission Packet Rate for 10 Base-T: 14880 per second
100 Base-TX: 148800 per second; 1000 Base-T: 1488000 per second
- Copper TP cable 4 pair Cat. 5e or 6 UTP

Optical Interface Specification

- Transceiver type: GbE Bidi 1X9 with Twin-Rate™ (SC connector)
- Wavelength (typical): single-mode: 1310TX/1550RX and 1550TX/1310RX 20km or 40km
- Supports 100 Mbps and 1 Gbps speed
- Supports auto-receive sensitivity function, no extra attenuators needed

General Specification

- Operate in store and forward mode
- Support IEEE 802.3 10 BASE-T
- Support IEEE 802.3u 100 BASE-TX
- Support IEEE 802.3ab 1000 BASE-T
- Support IEEE 802.3x 100 BASE-FX (100Mbps)
- Support IEEE 802.3z 1000 BASE-FX (1000Mbps)
- Support 1K MAC address
- Support Auto MDI / MDIX
- Support Max packet Length 9K bytes
- Support TP Port Auto-negotiation (10/100/1000 Base and Full/Half mode)
- Support FX Port Auto-negotiation (100/1000 Base, Full duplex mode Only)
- Support Optional fixed tag VLANs on TP ports
- Temperature: 0~50°C (Operating); 0~70°C (Storage)
- Humidity: 20~80% non-condensing (Operating); 10~90% (Storage)
- Power: DC Jack: Switching adaptor (12V, 1A); Consumption: <6W
Dimensions: 115mm x 90mm x 30mm (LxWxH) (without Fiber Tray)
195mm x 90mm x 30mm (LxWxH) (with Fiber Management Tray)
- Compliance: CE EN55022:2006 Class B, EN55024:1998+A1:2001+A2:2003
LVD: EN60950-1:2001
- MTBF: 100,000 h (25°C)



Diagnostic LEDs

- Power x1 LED
- TP-Speed x4 LED
- TP-Link x4 LED
- FX-Speed x 1 LED
- FX-Link x 1 LED

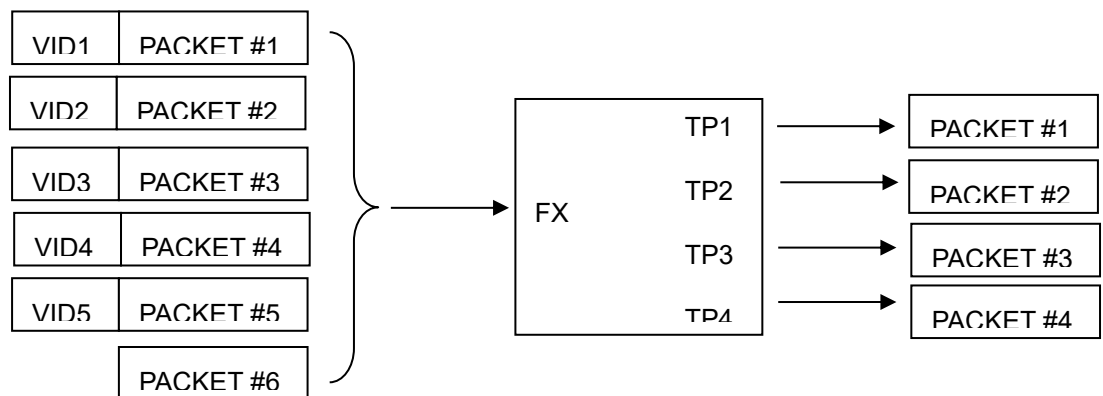
Fiber Management Specification

- Support Flexible Fiber Input and Fiber handling Design
- Support Extension Power Cord Design
- Support Switch Protect Function when Abnormal Remove
- Dimensions: 195mm x 90mm x 30mm (LxWxH)

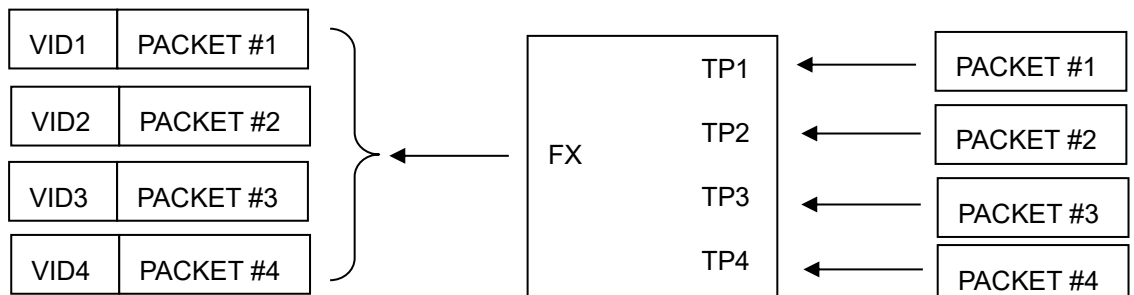
Optional fixed tag VLANs Description:

<Explain on Drawing>

Tagged VLAN on the path from Fiber to the TP



Tagged VLAN on the path from TP to the Fiber



<Explain on Table>

The Tagged VLAN Table

Data path	Tagged VLAN				
	TP1	TP2	TP3	TP4	Fiber
From TP to Fiber	Tag 10	Tag 20	Tag 30	Tag 40	Tagged VID 10, 20, 30, 40
From Fiber to TP	Tagged VID 10 in (and un-tag 10 before leave TP1)	Tagged VID 20 in (and un-tag 20 before leave TP2)	Tagged VID 30 in (and un-tag 30 before leave TP3)	Tagged VID 40 in (and un-tag 40 before leave TP4)	Tagged VID 10,20,30,40 (Discard others)

Ordering Information

Part Number	Description
AMCN-WT4M-3510x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1310TX/1550RX up to 20km
AMCN-WT4M-5310x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1550TX/1310RX up to 20km
AMCN-WT4D-3510x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1310TX/1550RX up to 40km
AMCN-WT4D-5310x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1550TX/1310RX up to 40km
AMCN-WT4M-3511x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Management Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1310TX/1550RX up to 20km
AMCN-WT4M-5311x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Management Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1550TX/1310RX up to 20km
AMCN-WT4D-3511x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Management Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1310TX/1550RX up to 40km
AMCN-WT4D-5311x-02	Unmanaged, 4PORT 10/100/1000 M Fiber Management Fiber Switch with included Twin-Rate™ 1x9 module WDM TRx 1550TX/1310RX up to 40km

Note: x=1 0~50°C/DC IN 12VDC US type power adaptor

x=2 0~50°C/DC IN 12VDC Euro type power adaptor

x=3 0~50°C/DC IN 12VDC PSE type power adaptor

